



Do Consumer Price Index headlines matter? They just might

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The U.S. Bureau of Labor Statistics (BLS) produces seven Principal Federal Economic Indicators (PFEIs). These seven PFEIs feature important statistical information about the U.S. labor market and prices. One of the most closely watched PFEI is the Consumer Price Index (CPI). The CPI is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Some of the people who may watch the change in CPI closely include landlords (to help them calculate changes in rental prices), Social Security pensioners (to determine their next cost-of-living adjustment), and Wall Street financial institutions and traders (to predict the next move of the stock and bond markets). This last group is what prompted Jeffrey A. Frankel and Ayako Saiki to research and publish their working paper, "Does it matter if statistical agencies frame the month's CPI report on a 1-month or 12-month basis?" (National Bureau of Economic Research, working paper no. 23754, August 2017).

Each month, BLS publishes the CPI news release highlighting the 1-month percentage change in the index. Statistics Korea and Swiss Statistics similarly publish their CPI-equivalent index by focusing on the 1-month change. However, the statistical agencies of many other nations publish their CPI-equivalent index by highlighting the 12-month percentage change. Frankel and Saiki's research examines "the patterns of reaction in the bond markets of different countries." Specifically, the researchers aim to determine if a bond market's reaction to a "surprise" in the headline number, whether it is the 1-month or 12-month percentage change, overshadows any surprise in the nonheadline number, which appears later in the news release. A surprise in the headline number would be considered a monthly or annual CPI reading that is higher or lower than analysts' forecasts the day before the official release of the data.

Frankel and Saiki note that the impact of inflationary news causing a jump in interest rates has been documented extensively and exhibits a highly significant positive correlation dating back to the early 1980s. This strong correlation allows for an easy comparison between the reported CPI value from countries emphasizing a 1-month change versus a 12-month change and the resulting 1-day change in 10-year bond prices. The authors further examine whether a similar correlation existed between economic news and reactions in the equity markets but find that there was too much "theoretical ambiguity" to establish a consistent correlation.

All major countries' statistical agencies report both the 1-month and 12-month percentage change in CPI within their data releases. However, the authors' preliminary results show some support for their hypothesis that reaction in the bond market is related to the "surprise" in the headline CPI number and not to the alternative percentage-change number found later in the data release. Frankel and Saiki write that further research could test other statistical releases, such as growth in gross domestic product, industrial production, the trade balance, and



employment. Moreover, data could be reviewed at a higher frequency, such as at hourly or half-hourly intervals rather than only one day to the next, to better capture the effect.

Frankel and Saiki conclude that, despite the limitations of current research, the 12-month change may be more informative than the 1-month change and better able to help people understand the state of the economy.